# Chapter 2

#### **GENERAL PROCEDURE**

Many IPHST actions are common to all, or several, equipments. These common actions are given here. Individual equipment IPHST procedures, outlined in Chapter 3, detail special needs or exceptions.

# 2.1 Inspection

# 2.1.1 New or Refurbished Equipment

If possible, make the receiving inspection before the shipment is unloaded. Check the shipment against the bill of lading and inspect the equipment's condition. Make a careful visual inspection of containers and sheathing to look for signs of damage. Also inspect any anchoring hardware, blocking and bracing, or other protection that can be seen without opening the package. If the equipment is packaged with desiccant, check the status of the humidity indicators. If the equipment is shipped in a pressurized container or is internally pressurized, manually check the relief valve to be sure the container is pressurized. If the visual inspection reveals container damage or the humidity indicator is pink or white, contact personnel qualified to make a more detailed technical inspection. Examine classified shipments carefully for signs of tampering. Report any such signs at once! Figure 1, at the end of this chapter, is a checklist that can be used when conducting inspections of newly received equipments. Any defective packaging should be reported in accordance with NAVSUP Publication 723 (Navy Inventory Integrity Procedures) using form SF364.

# 2.1.2 RFI Equipment Turned In

Ready-for-issue (RFI) equipment turned in by users may arrive in conditions that vary from professionally packaged to completely unpackaged. Inspect packaging as for new equipment. Also check any parts of the actual equipment that can be seen. Look for damage, signs of corrosion, obviously missing parts, or anything else that might indicate the condition is <u>not RFI</u>. If condition appears doubtful, call in personnel qualified to make a technical inspection. When the equipment is unpackaged or openings are exposed, check for trapped water and drain if required. When equipment has been returned in its original container, make sure the markings have been changed as needed to show the current condition. For example, does the container show Method 50 (i.e. water-vaporproof protection with desiccant) packaging when the equipment is not now packaged Method 50?

# 2.1.3 Non-RFI Equipment Turned In

Equipment that is not in ready-for-issue condition when turned in still requires inspection. Packaging, markings, and visible parts of the equipment should be inspected the same utilizing the same criteria as for RFI equipment. If the condition code shows the equipment is not repairable, inform the cognizant Inventory Manager/Repairables Management Field Representative (RMFR), as appropriate, and request disposition instructions. If the equipment is supposed to be repairable but looks doubtful, call in personnel qualified to make a technical inspection.

#### 2.1.4 Undetermined Condition

If equipment that has been turned in is in an unknown condition, treat it as if it were a non-RFI but repairable unit until the actual condition has been determined. Call in personnel qualified to make a technical inspection as soon as possible. Store such undetermined condition material in an area suitable for unpackaged equipment in general, as designated in the applicable Chapter 3 Individual Equipment IPHST procedure, "Storage" subparagraph.

# 2.1.5 Follow-Up Actions

If a technical inspection shows that equipment does not match the condition in which it is carried in the records, report the change to the cognizant Inventory Manager/Repairables Management Field Representative, as appropriate, and request instructions. Also report the presence of any improper packaging. Do not package/repackage equipment unless so directed, except that unpackaged equipment must be protected against damage during handling. As a minimum, place, secure, and cover large items on a pallet or skids; smaller equipments should be placed in an open container with cushioning.

# 2.2 Packaging/Preparation For Delivery

# 2.2.1 Complete Preservation-Packaging and Packing

Levels of protection necessary for adequate preservation-packaging are governed by destination, mode of shipment, anticipated storage conditions, and the nature of the equipment. Preparation for delivery instructions. should specify the levels required. All equipment shall be packaged and preserved to the specified level of protection defined by MIL-STD-2073-1 (see Appendix A for general definitions). Inventory Managers will normally request level A preservation-packaging and levels A, B, or C packing of equipments at the point of origin. Check the item's Packaging Requirements Code (PRC) (see Appendix C) or contact the Inventory Manager if the levels of protection are unknown. Request specific instructions if they do not come automatically. Chapter 3 provides general guidelines for levels of protection required and specific requirements for individual equipments.

# 2.2.2 Repackaging

The Inventory Manager directs the replacement of damaged or worn-out packaging. Unless otherwise directed, restore damaged packaging to the original condition. Repair and reuse the original containers, blocking, bracing, and anchoring materials whenever possible. When replacing Method 50 packaging, also replace the desiccant and humidity indicator. Repressurize metal containers, when necessary, with dry nitrogen, dry compressed air, or gas indicated on the tag/container to the original pressure. Patch exterior packaging only to the extent necessary to restore the original condition. Replace manuals, spare parts, etc. in their original location.

# 2.2.3 Minimum Packaging for Shipment

When shipping RFI equipments for re-installation or non-RFI equipments for refurbishment, packaging shall protect the item from damage and the environment. The packaging must also comply with the rules of the transportation means being used. Unless NAVSEA specifically directs otherwise, package to at least the level outlined below. Consult NAVSUP Publications 502 and 503 if more information on the methods, materials, and containers is needed.

#### 2.2.3.1 Container

Use the original container that the equipment (or its replacement) came in, if possible. If the original container is not available, make a container that will support and protect the equipment to the same degree as the original container (see Chapter 3 for packaging guidance). Tighten all screws, knobs, and clamps and make sure that any locking devices are engaged.

# 2.2.3.2 Packing Material

Cushion all protrusions, projections, corners, sharp edges, and fragile areas. Cushion as required to protect the equipment and to prevent the puncture or tearing of barrier material. Loose excelsior, shredded paper, or other corrosive materials are not to be used for cushioning of Navy material. Polystyrene (loose fill) material of any kind may not be used for any packaging or packing applications

## **2.2.3.3 Bracing**

Anchor large equipments securely to the container base. Add blocking and bracing as needed to prevent equipment damage during handling and shipment.

#### 2.2.3.4 Barrier Seal

Seal equipment requiring method 50 preservation-packaging in waterproof/vaporproof barrier material. See Chapter 3 subparagraphs titled "Packaging/Preservation for Delivery" for additional information.

#### 2.2.3.5 Technical Manuals

Usually technical manuals and/or maintenance records turned in with the equipment should be enclosed in a transparent waterproof bag and shipped in the same container. They must not be placed inside the barrier material protecting the equipment container nor must they be placed inside the barrier material protecting the equipment but, rather, they must be secured where they are readily accessible when the container is opened. If equipment is not classified, but the technical manuals are, pack and ship the manuals in accordance with Departmental Regulations.

#### 2.2.3.6 Detached Material

Any detached components, spare parts, or special tools that were turned in with the equipment must be shipped with the main unit. If possible, these items should be packaged in their own interior container(s) and be packed inside the same outer container as the equipment. Secure the parts containers so they cannot damage the equipment during handling and shipment. If it is not practical to ship parts, etc., in the main container, pack them separately and ship on the same bill of lading as the equipment.

# 2.2.4 Special Packaging Requirements for Electrostatic Discharge Sensitive Equipment

Electrostatic Discharge (ESD) sensitive items are identified in MIL-HDBK-773. ESD items must be packaged in accordance with the requirements of MIL-HDBK-263 and MIL-HDBK-773.

# 2.2.5 Special Packing Requirements for Classified Material

Seal classified material so that the container contents cannot be exposed without showing evidence of forcible entry. Reinforce containers with steel strapping or pressure-sensitive, reinforced, filament tape. Use steel strapping only on wood, plywood, or wood-cleated containers. Apply strapping perpendicular and parallel to container length. Join the intersections of steel strapping with a strapping seal or clamp, preferably the pressure-clamp type. The clamp must be of a type that will not be damaged by transit or stacking but constructed so that tampering will cause mutilation that can be easily detected.

# 2.2.6 Container Marking

Include the following markings on containers, as applicable (detailed information is in MIL-STD-129). Items marked with a \* may not apply to shipment of used equipment. Figure 2 at the end of this chapter provides an example of typical MIL-STD-129 marking requirements. MIL-STD-129 addresses marking elements such as:

- a. National Stock Number or manufacturer's part number if the NSN is unknown.
- b. Commercial and Government Entity (CAGE) Code.
- c. Manufacturer's Part Number.
- d. Nomenclature and Condition Code.
- e. Quantity and Unit of Issue.
- f. Contract Number.
- g. Level of Preservation-Packaging/Packing and Date.
- h. Gross Weight and Cube.
- Special Structural or Handling Instructions.

#### NOTE

Special instructions could include, for example, a requirement to mark containers over ten (10) feet in length, or those which are unbalanced, with the words "CENTER OF BALANCE" and vertical lines indicating the center of balance, and "SLING HERE" to mark the appropriate sling points.

j. Repackaging Markings.

#### NOTE

In cases where an item is being repackaged, ensure that intermediate/interior containers are properly marked.

k. Special Markings

#### NOTE

See Chapter 3 subparagraphs titled "Packaging/Preservation for Delivery" for additional information.

# 2.3 Handling

# 2.3.1 Special Handling Equipment and Tools

Standard forklift trucks or cranes can handle most equipment if proper procedures are observed. Check for weight markings and make sure the handling equipment has enough capacity. If no weight is marked, check inventory for identical items. If the weight cannot be found, estimate the maximum it could be and choose equipment accordingly or contact the cognizant NAVSEA Life Cycle Manager (LCM) for the design weight.

# 2.3.2 Special Handling Procedures and Safety Precautions.

## a. Equipment in Containers

Check container markings for special handling instructions. If there are none, observe normal handling procedures and safety precautions for container size and weight. Equipment turned in from the field may not be as well packaged as new equipment and should be handled with extra caution.

# b. Unpackaged Equipment

Securely anchor large equipment to pallets or skids for handling. Unpacked equipment is easily damaged. If cranes are used in handling, rig the slings so that no pressure is put on the equipment, but make sure the load is still well balanced for equipment and personnel safety. Small equipments should be placed in an open container and cushioned against damage or shifting.

# c. Safety

It shall be the responsibility of all warehouse personnel to be fully cognizant of the safety requirements for equipment and personnel in the system. Warehousemen shall be familiar with and observe all applicable Occupational Safety and Health Administration (OSHA) regulations.

## 2.4 Storage

**2.4.1 Environment** See Chapter 3 individual equipment procedures.

## 2.4.2 Segregation

Make sure all equipment is marked with the right condition code before it is placed in storage. If possible, RFI and non-RFI should be stored in different locations to further decrease the chance of accidentally issuing non-RFI material. Store unpackaged equipments in an area where they are least likely to be damaged by passing handling equipment. Make sure that technical manuals, maintenance records, or other items received with unpackaged items do not become lost during storage. Consult equipment handbook for any specific or unusual requirements.

#### 2.4.3 Shelf Life

Some equipment has an indefinite shelf life when packaged, packed, and stored as specified for new equipment. Current shelf life directives should be referenced prior to prolonged storage. The shelf life for items that are not correctly packaged cannot be predicted. Such items should be periodically checked for signs of deterioration and repackaged, if necessary:

# 2.5 Transportation

#### 2.5.1 Mode

Unless individual equipment procedures show unusual transportation problems, ship by rail, truck, water, or air as determined by cost and required delivery date. Small parcel services may be used within weight and dimension limitations.

# 2.5.2 Preparation

Equipment that has been turned in may not be packaged well enough for shipment by the mode selected. When planning shipment of such equipment, check the packaging and repackage as needed.

# 2.5.3 Loading

Handle containers as outlined above. Load in accordance with carrier rules and regulations. Secure containers to prevent shifting or movement. Any equipment shipped, or locally moved, by an open vehicle must be shrouded for protection against the weather. If unpackaged equipment is being moved locally for installation or refurbishment, make sure that any other items on the vehicle cannot shift and damage the equipment.

# Figure 1

#### VISUAL INSPECTION CHECKLIST

The following is a basic checklist for warehouse use. Command and local procedures may require additional inspections and/or condition reports.

# \* is there any visible damage to shipping container?

Report any defective/damaged packaging using Form SF364 in accordance with Report Of Discrepancy (ROD) Instructions found in NAVSUP Publication 723 (Navy Inventory Integrity Procedures).

# \* is there sufficient clearance for forklift handling?

If clearance is insufficient, securely anchor the container/equipment to a pallet or skid for handling. If cranes are to be used, rig slings so that no pressure is put on the equipment but the load is still well balanced for equipment and personnel safety. Observe "CENTER OF BALANCE" and "SLING POINT" markings. Small equipments should be placed in an open container and cushioned against damage or shifting.

# \* Classified shipments: Does the container show any signs of opening or tampering?

If tampering is suspected, report incident to local security office <u>immediately</u> and notify the cognizant Inventory Manager.

## \* is the packaging adequate for the anticipated environment?

If not, notify the cognizant Inventory Manager. Repackage if directed to do so. Check the appropriate Chapter 3 Individual Equipment Procedure, subparagraph titled "Packaging/Preservation for Delivery".

# \* is the shipping container strong enough to withstand anticipated handling, storage, and transportation actions?

If possible, repair or patch the original container to the extent necessary to restore its original condition. When required, repackage to, at least, the level cited in the applicable Chapter 3 Individual Equipment Procedure. Consult NAVSUP Publications 502, and 503 for more detailed information.

# \* Are the shipping container banding, taping, or closures intact?

Restore banding, taping, or closures to their original condition.

# \* Are pressurized containers maintaining pressure?

Crack the manual check valve to see if the container is pressurized. If pressure is low or not present, repressurize with dry nitrogen, dry compressed air, or gas indicated on the tag/container to the original pressure. Contact the cognizant MATREP for assistance.

# \* Is the package correctly marked and easily identified per MIL-STD-129?

See applicable Chapter 3 Individual Equipment Procedure subparagraph titled "Marking". Report deficient marking, via Form SF364, in accordance with NAVSUP Publication 723. Notify the cognizant Inventory Manager.

# \* Are markings clear and legible? If labels are applied are they damaged or missing?

When necessary, remark in accordance with MIL-STD-129 and applicable Chapter 3 Individual Equipment Procedure, subparagraph titled "Marking".

# \* Are packing list and unpacking instructions attached?

If not, notify the cognizant Inventory Manager.

# \* If shipping container is opened, is interior packaging intact and undamaged? Are anchoring, blocking, bracing, and cushioning intact?

Report damaged packaging via Form SF364 in accordance with NAVSUP Publication 723. If possible; repair packing to its original condition.

## \* Is Form SF364 required? (See paragraph 2.1.1)

Complete a Form SF364, Report Of Discrepancy (ROD), for reporting of defective, damaged, or insufficient packaging, missing or improper marking, damaged or missing equipment, incorrect item, or incorrect quantity. Consult NAVSUP Publication 723 for further details and instructions on completion of Form SF364.

# \* Is the item being placed in correct storage area?

Check the storage requirements cited in the Individual Equipment Procedures. If equipment cannot be stored as required, store in an area that affords the next best level of protection and inform the cognizant Inventory Manager. Avoid outside storage whenever possible.

# \* Are handling points identified, such as sling points, center of balance, etc.?

If not, consult cognizant MATREP or Life Cycle Manager prior to lifting.

# Figure 2

## **TYPICAL MIL-STD-129 MARKING**

# **UNIT AND INTERMEDIATE CONTAINER MARKINGS**

Bar Coded National Stock Number

National Stock Number
Prime Contractor
Manufacture's CAGE and Part Number
Nomenclature
Quantity
Contract Number
Level of Protection and Date of Pack

# **EXTERIOR CONTAINER MARKINGS**

National Stock Number
Manufacturer's Code and Part Number
Nomenclature
Quantity, Unit of Issue
Level of Protection, Date
Gross Weight and Cube

Bar Coded National Stock Number

Contract Number Contractor's Name Contractor's Address

Table 1

# **DEFINITION OF METHODS AND SUBMETHODS OF PRESERVATION-PACKAGING**

# (From MIL-STD-2073-1D)

Method 10	Method 20	Method 30
(FORMERLY Method III)	(FORMERLY Method I)	(FORMERLY Method IC)
Packaged for mechanical and physical protection only.	Preservative coating only (with greaseproof wrap as required).	Waterproof or waterproof- greaseproof protection with preservation as required.
Method 40	Method 50	
(Formerly Method IA)	(FORMERLY Method II)	
Water-vaporproof protection (with preservative as required).	Water-vaporproof protection with desiccant.	
<u>Submethods</u>	<u>Submethods</u>	<u>Submethods</u>
<b>41</b> - Water-vaporproof bag, sealed	51 - Cushioned item bag	31 - Waterproof bag, sealed
<b>42</b> - Container, bag, container	<b>52</b> - Container, barrier, container	<b>32</b> - Container, waterproof bag, sealed
<b>43</b> - Floating barrier	53 - Floating bag	<b>33</b> - Greaseproof, waterproof bag, sealed
<b>44</b> - Rigid container other than all metal, sealed	<b>54</b> - Rigid container other than all metal, sealed	oug, coulou
<b>45</b> - Rigid metal container, sealed	<b>55</b> - Rigid metal container, sealed	